D03C

SHEDDING MECHANISMS; PATTERN CARDS OR CHAINS; PUNCHING OF CARDS; DESIGNING PATTERNS

Definition statement

This place covers:

all mechanisms and methods involved in the formation of a weaving shed.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

The term "shedding" relates to an operation in which warp yarns are being moved apart so that the weft yarn can be inserted (i.e. part of the warp yarns are brought in an upper position and others are brought in a lower position).

D03C 1/00

Dobbies

Definition statement

This place covers:

shedding mechanisms with a selectable position of the heald frame.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Shedding mechanisms wherein the position of the heald frame is not	D03C 5/00
selectable	

D03C 1/005

{Electronic dobbies}

Definition statement

This place covers:

dobbies with an electronic selection mechanism.

D03C 1/02

Single-lift dobbies, i.e. dobbies in which the same draw-knife or equivalent operates for every pick (D03C 1/10 takes precedence)

Definition statement

This place covers:

dobbies in which the same draw-knife or equivalent operates for every pick. Normally these comprise a mechanically operated selection mechanisms.

D03C 1/06

Double-lift dobbies, i.e. dobbies in which separate draw-knives or equivalent operate on alternate picks

Definition statement

This place covers:

dobbies in which separate draw-knives or equivalent operate on alternative picks. Normally these comprise a mechanically operated selection mechanism.

D03C 1/10

Centre-shed dobbies, i.e. shed formed by lifting some threads and lowering the others from central shed-closed position

Definition statement

This place covers:

dobbies whereby the shedding movement always starts from the middle position (i.e. the position where the warp yarns are flat). Normally these comprise a mechanically operated selection mechanism.

D03C 1/14

Features common to dobbies of different types (stop motions acting on defective operation of shedding mechanisms D03D 51/46)

References

Limiting references

This place does not cover:

Ī	Stop motions acting on a defective operation of shedding mechanisms	D03D 51/46
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Connecting-rods or like links pivoted at both ends	F16C 7/00, F16C 7/02,
	<u>F16C 7/06</u>

D03C 1/142

{Leveling mechanisms}

Definition statement

This place covers:

mechanisms to bring all warps to the same level.

D03C 1/144

{linking to the heald frame}

Definition statement

This place covers:

connections between a dobby and heald frame.

D03C 1/146

{Independent drive motor}

Definition statement

This place covers:

shedding mechanisms driven by a separate motor, independent from the main motor.

References

Limiting references

This place does not cover:

Shedding mechanisms whereby each heald frame is driven by a separate	D03C 13/025
drive motor	

D03C 1/148

{Eccentrics}

Definition statement

This place covers:

dobbies comprising eccentrics to drive the shafts.

D03C 1/22

Needles; Needle boxes; Needle boards

Definition statement

This place covers:

mechanisms with needles to read information from the pattern cards or chains.

D03C 1/24

Cylinders; Cylinder battens

Definition statement

This place covers:

mechanisms in which cylinders or pattern cards or chains driven by cylinders cooperate with the selection hooks of the dobby.

D03C 3/00

Jacquards (controlling jacquard by scanning design <u>D03C 17/06</u>; for gripper Axminster looms <u>D03D 39/08</u>)

Definition statement

This place covers:

shedding mechanisms with healds or other yarn engaging devices, which can be individually selected according to a predetermined weaving pattern.

D03C 3/02

Single-lift jacquards

Definition statement

This place covers:

selection mechanisms comprising a single selectable hook for each heald.

D03C 3/06

Double-lift jacquards

Definition statement

This place covers:

selection mechanisms comprising two selectable hooks for each heald.

D03C 3/10

Centre-shed jacquards

Definition statement

This place covers:

jacquards wherein the shedding movement always starts from the middle position (i.e. where the warp yarns are flat).

D03C 3/205

{Independently actuated lifting cords}

Definition statement

This place covers:

jacquards wherein each lifting cord or each group of lifting cords being driven by a separate actuator.

D03C 3/22

Fluid-operated jacquards

Definition statement

This place covers:

pneumatic or hydraulic jacquard mechanisms.

D03C 3/34

Cylinder operating mechanisms

Definition statement

This place covers:

mechanisms in which cylinders or pattern cards or chains driven by cylinders selectively engage with jacquard hooks.

D03C 3/36

Griffe operating mechanisms

Definition statement

This place covers:

knife mechanisms, i.e. mechanisms comprising knives oscillating in opposite directions and which are selectively engagable with the jacquard hooks.

D03C 3/44

Lingoes

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Attachments or mountings of wound springs	F16F 1/12
Damping by frictional contact between the spring and braking means	F16F 13/02

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

In this group, the term "lingoes" indicates means to tension the lifting cords, normally by elastic force or by their own weight.

D03C 5/00

Cam or other direct-acting shedding mechanisms, i.e. operating heald frames without intervening power-supplying devices

Definition statement

This place covers:

mechanisms whereby the movement of the shedding frame is not programmable. There is no selection of the frame, the frame movement is always the same. A typical example is a shedding mechanism where the shaft movement is determined by a cam and the fixed movement determined by said cam is followed for each weft insertion.

D03C 5/005

{Leveling mechanisms}

Definition statement

This place covers:

cam mechanisms or other direct-acting shedding mechanism to bring all warps to the same level.

D03C 7/00

Leno or similar shedding mechanisms

Definition statement

This place covers:

mechanisms and methods to make warp yarns cross between the weft insertions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Leno-woven fabrics	D03D 19/00
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D03C 7/005

{Combined leno and patterned shedding motion}

Definition statement

This place covers:

shedding motions with both a leno shedding motion and a second "main" shedding motion (e.g. jacquard or dobby) for the warp threads.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fabric patterns with a leno binding yarn additional to the weft and warp	D03D 13/006
yarns	

D03C 7/02

Gauze healds

Definition statement

This place covers:

in particular mechanisms with a doup and heddle.

D03C 7/04

Mechanisms having discs oscillating about a weftwise axis and having apertures for warp threads

Definition statement

This place covers:

mechanisms having discs oscillating about a weftwise axis and having apertures for warp threads. These discs oscillate between each or a limited number of picks to avoid twist.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices for twisting warp threads repeatedly in the same direction	<u>D03</u>
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D03C 7/08

D03C 7/06

Mechanisms having eyed needles for moving warp threads from side to side of other warp threads

Definition statement

This place covers:

in particular mechanisms with a comb-like structure.

D03C 7/08

Devices for twisting warp threads repeatedly in the same direction

Definition statement

This place covers:

devices for twisting warp threads repeatedly in the same direction. These normally have a bobbin on the disc.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Mechanisms which change direction between each or a limited number of	D03C 7/04
picks	

D03C 9/00

Healds; Heald frames (for leno shedding D03C 7/00)

Definition statement

This place covers:

healds and frames for holding the healds.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Healds are small strips of material, wire or cord with an eyelet through which a warp yarn is threaded. The healds are moved whereby the warp yarns follow this movement. A shed is formed by moving the warp yarns to different positions.

Synonyms and Keywords

In this group, as well as in the patent documents classified in this group, the term heald is a synonym for heddle.

D03C 9/02

Healds

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Wire-working in the manufacture of loom heddles	
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B21F 45/08

D03C 9/022

{anti-buckling}

Definition statement

This place covers:

heddles with a stiffening element in its construction, e.g. longitudinal bend.

D03C 9/024

{Eyelets}

Definition statement

This place covers:

designs of eyelets.

D03C 9/028

{Metal}

Special rules of classification

This subgroup replaces IPC subgroup **D03C9/04**, which is not used in this scheme.

D03C 9/0683

{Arrangements or means for the linking to the drive system}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Couplings of the quick-acting ty	pe (i.e. couplings suitable for the harness	F16L 37/00
cord)		

D03C 11/00

Selvedge shedding mechanisms not forming part of main shedding mechanism (selvedge jacquards D03C 3/18; leno selvedge mechanism D03C 7/00)

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Selvedges not made by a shedding mechanism (e.g. by tucking back in	<u>D03D 47/40</u> .
the weft yarns)	

D03C 13/00

Shedding mechanisms not otherwise provided for

Definition statement

This place covers:

shedding mechanisms not otherwise provided for.

D03C 13/02

{with independent drive motors (D03C 1/146 and D03C 3/205 take precedence)}

Definition statement

This place covers:

shedding mechanisms other than dobbies and jacquards, which are driven by a separate motor, independent from the main motor.

D03C 13/025

{with independent frame drives}

Definition statement

This place covers:

shedding mechanisms wherein each frame is driven by one or more separate independent motors.

D03C 15/00

Pattern cards or chains

Definition statement

This place covers:

jacquard or dobby cards or jacquard chains which store pattern information.

References

Limiting references

This place does not cover:

D03C 17/00

Card-punching apparatus (marking record carriers in digital fashion G06K)

Definition statement

This place covers:

apparatuses for punching jacquard or dobby cards or jacquard chains for storing the pattern information.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Jacquard or dobby cards are punched cards containing pattern information and are used for controlling a jacquard meachanism or dobby. Jacquard chains are series of jacquard cards.

D03C 19/00

Miscellaneous methods or devices concerned with designing or making patterns

Definition statement

This place covers:

miscellaneous methods or devices concerned with designing or making patterns, in particular those methods or devices not covered by $\underline{\text{D03C 15/00}}$ and $\underline{\text{D03C 17/00}}$.

D03C 19/005

{Electronic}

Definition statement

This place covers:

Storage of pattern information in electronic form.